

Application No.: 09/622,931

Docket No.: 21581-00210-US

AMENDMENTS TO THE CLAIMS

Please cancel claims 4, 6, 11 and 18 without prejudice to their reentry at some later time.

1. (Currently Amended) A vinyl polymer having at least one terminal group of the general formula (1) per molecule;



wherein R represents hydrogen or an organic group containing 1 to 20 carbon atoms,

which polymer is obtained by living radical polymerization; and wherein said vinyl polymer comprises a monomeric unit derived from a (meth) acrylic monomer,

and wherein the ratio of weight average molecular weight (Mw) to number average molecular weight (Mn) as determined by gel permeation chromatography [Mw/Mn] is less than 1.8.

2. (Original) The vinyl polymer according to Claim 1

wherein R is hydrogen or a hydrocarbon group of 1 to 20 carbon atoms.

3. (Previously Presented) The vinyl polymer according to Claim 1

wherein R is hydrogen or a methyl group.

4. (Canceled)

5. (Currently Amended) The vinyl polymer according to Claim [[4]] 1,

which is an acrylic ester polymer.

6. (Canceled)

7. (Canceled)

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8. (Previously Presented) The vinyl polymer according to Claim 1 wherein said living radical polymerization is atom transfer radical polymerization.
9. (Original) The vinyl polymer according to Claim 8 wherein the transition metal complex catalyst for said atom transfer radical polymerization is selected from among complexes of copper, nickel, ruthenium or iron.
10. (Original) The vinyl polymer according to Claim 9 wherein said transition metal complex is a copper complex.
11. (Canceled)
12. (Previously Presented) The vinyl polymer according to Claim 1, which is obtained by reacting an olefin polymer having a terminal structure represented by the general formula (2) with a compound represented by the general formula (3):
$$-\text{CR}^1\text{R}^2\text{X} \quad (2)$$
wherein R^1 and R^2 each represents a group attached to the ethylenically unsaturated group of the vinyl monomer; X represents chloro, bromo or iodo,
$$\text{M}^+\text{OC(O)C(R)=CH}_2 \quad (3)$$
wherein R represents hydrogen or an organic group containing 1 to 20 carbon atoms; M^+ represents an alkali metal or quaternary ammonium ion.
13. (Previously Presented) The vinyl polymer according to Claim 1, which is obtained by reacting a hydroxyl-terminated vinyl polymer with a compound of the general formula (4):
$$\text{XC(O)C(R)=CH}_2 \quad (4)$$
wherein R represents halogen or an organic group containing 1 to 20 carbon atoms; X represents chloro, bromo, or a hydroxyl group.

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14. (Previously Presented) The vinyl polymer according to Claim 1, which is obtained by reacting a hydroxyl-terminated vinyl polymer with a diisocyanate compound and further causing the residual isocyanate group to react with a compound of the general formula (5):



wherein R represents hydrogen or an organic group containing 1 to 20 carbon atoms; R' represents a bivalent organic group containing 2 to 20 carbon atoms.

15. (Previously Presented) The vinyl polymer according to Claim 12 wherein R is hydrogen or a hydrocarbon group of 1 to 20 carbon atoms.

16. (Original) The vinyl polymer according to Claim 15 wherein R is hydrogen or a methyl group.

17. (Previously Presented) The vinyl polymer according to Claim 1, the number average molecular weight of which is not less than 3000.

18. (Canceled)

19. (Previously Presented) A curable composition comprising the vinyl polymer according to Claim 1.

20. (Original) The curable composition according to Claim 19 comprising a radical-polymerizable group-containing monomer and/or oligomer.

21. (Original) The curable composition according to Claim 19 comprising an anionic-polymerizable group-containing monomer and/or oligomer.

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22. (Previously Presented) The curable composition according to Claim 20 comprising a (meth) acryloyl group-containing monomer and/or oligomer.

23. (Previously Presented) The curable composition according to Claim 22 comprising a monomer and/or oligomer containing a (meth) acryloyl group and having a number average molecular weight of not more than 2000.

24. (Previously Presented) The curable composition according to Claim 19 which is curable by means of actinic ray.

25. (Original) The curable composition according to Claim 24 comprising a photopolymerization initiator.

26. (Original) The curable composition according to Claim 25 wherein said photopolymerization initiator is a photoradical initiator.

27. (Original) The curable composition according to Claim 25 wherein said photopolymerization initiator is a photoanion initiator.

28. (Previously Presented) The curable composition according to Claim 19 which is curable by heating.

29. (Original) The curable composition according to Claim 28 wherein a thermopolymerization initiator is selected from the group consisting of an azo initiator, a peroxide, a persulfate and a redox initiator.

30. (Previously Presented) An aqueous emulsion comprising the vinyl polymer according to Claim 1.

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31. (Previously Presented) An aqueous emulsion comprising the curable composition according to Claim 19.

32. (Original) A method of protecting a substrate Claim 31 and curing the emulsion in situ.

which comprises covering the substrate with the aqueous emulsion according to

33. (Previously Presented) A pressure sensitive adhesive composition comprising the curable composition according to Claim 19 or an aqueous emulsion thereof.

34. (Previously Presented) A pressure sensitive adhesive obtained from the pressure sensitive adhesive composition according to Claim 33.